

What is claimed is:

1. An atomization system (1) for fuels, particularly for charging a chemical reformer for obtaining hydrogen, comprising at least one metering device (2) for metering fuel at at least one metering point (5) into a connecting tube (4) capable of receiving a temperature-adjusted substance stream.

wherein, the connecting tube (4) features at least one atomization point (8) located downstream of the at least one metering point (5).

2. The atomization system as recited in Claim 1,

wherein, the metering device (2) is designed as a low-pressure fuel injector (2).

3. The atomization system as recited in Claim 1 or 2,

wherein, the low-pressure fuel injector (2) is positioned at an end face (3) of the connecting tube (4).

4. The atomization system as recited in one of Claims 1 through 3,

wherein, the metering point (5) is formed on the low-pressure fuel injector (2).

5. The atomization system as recited in one of Claims 1 through 4,

wherein, the temperature-adjusted substance stream is fed between the metering point (5) and the atomization point (8).

6. The atomization system as recited in Claim 5,

wherein, the temperature-adjusted substance stream is able to be supplied via a tube (6).

7. The atomization system as recited in Claim 6,

wherein, the tube (6) discharges into the connecting tube (4) at an angle of approximately 90°.

8. The atomization system as recited in one of Claims 1 through 4,

wherein, the temperature-adjusted substance stream is supplied on the downstream side of atomization point (8).

9. The atomization system as recited in Claim 8,

wherein, the mixture formed of fuel and substance stream is transmitted along an axis (11) of connecting tube (4).

10. The atomization system as recited in Claim 8,

wherein, the mixture formed of fuel and substance stream is transmitted perpendicular to an axis (11) of connecting tube (4).

11. The atomization system as recited in one of Claims 1 through 10,

wherein, multiple atomization points (8) are provided.

12. The atomization system as recited in one of Claims 2 through 4,

wherein, the metering point (5) and the atomization point (8) are formed jointly on the low-pressure fuel injector (2).

13. The atomization system as recited in Claim 12,

wherein, the low-pressure fuel injector (2) is inclined at a specified angle with respect to an axis (11) of the tube (6) and of the connecting tube (4).

14. The atomization system as recited in one of Claims 1 through 13,

wherein, the atomization point (8) features an atomization device in the form of a swirl disk, a spray-orifice disk, a swirl insert or a swirl nozzle having one or more orifices.

15. The atomization system as recited in one of Claims 1 through 14,

wherein, the atomization points (8) are at least in part located in rounded corners (12) of an end face (7) of the connecting tube (4).